THE ORIENTAL LILY-FLOWER THRIPS *TAENIOTHRIPS* EUCHARII (WHETZEL) (THYSANOPTERA: THRIPIDAE) NEW TO AUSTRALIA

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Abstract

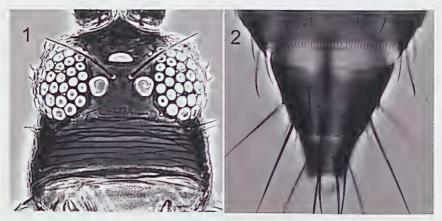
Taeniothrips eucharii (Whetzel) is newly recorded from Australia, near Brisbane in Queensland and on Lord Howe Island off the coast of New South Wales, from the flowers of various Amaryllidaceae.

Introduction

In late December 2007, in a garden on Lord Howe Island, three females of a large, dark but unidentifiable thrips were found in a flower of a *Crinum* lily (Amaryllidaceae). Subsequent study indicated that this was a species of *Taeniothrips*, an essentially Asian genus not known previously from Australia. This discovery triggered a search at Brisbane of suitable garden lily flowers during January 2008, and the same thrips species was found to be well established, with both sexes present in the flowers of *Zephyranthes* and *Hymenocallis* (Amaryllidaceae). The thrips was later identified as *Taeniothrips eucharii* (Whetzel), using reference specimens collected during 2006 in the gardens of the University of Malaya at Kuala Lumpur, Malaysia, from *Hymenocallis* flowers.

Discussion

This thrips was described originally in 1923 from Bermuda on Eucharis, but has also been described, under two synonymic names, from Taiwan and from Japan (see Mound 2008). Bhatti (1990) recorded it from Korea, China, Hawaii and the Netherlands, while Diffie et al. (2008) listed it from Florida and Georgia, USA. Apart from 26 fossil species, there are 22 species listed (Mound 2008) in the genus Taeniothrips, of which three are from Europe, one from western North America and 18 from various Asian countries. Taeniothrips eucharii therefore presumably originated in Asia, although there is no modern treatment of the genus from which relationships might be deduced. Within the Australian fauna of Thripidae, T. eucharii is recognisable by the rather long head that is constricted behind the eyes (Fig. 1), with long interocellar setae that arise close together but without a pair of setae in front of the first ocellus, and from the very long and regular comb of microtrichia on the eighth abdominal tergite (Fig. 2). The only Thripidae in Australia with which T. eucharii might be confused are orchid flower thrips of the genus Dichromothrips Priesner; however these have the ocellar setae shorter and positioned differently, the metathoracic endofurca bears a welldeveloped spinula (absent in Taeniothrips) and they do not have the two pairs of long setae on the pronotum that are present in Taeniothrips species.



Figs 1-2. Taeniothrips eucharii. (1) head; (2) tergites VIII-X.

This thrips has presumably been distributed by the horticultural trade; during the early 1960s it was taken regularly by the quarantine service of the USA (O'Neill 1962). It seems to breed particularly on species of Amaryllidaceae and has been taken in association with the flowers, leaf bases and bulbs of several genera of this family, including *Crinum, Eucharis, Hymenocallis, Lycoris, Narcissus* and *Zephyranthes*. Masami Masumoto (pers comm.) has informed us that this thrips is found commonly on *Liriope* (Liliaceae) in Japan and has been taken in quarantine from *Lycoris* imported from Taiwan. Records from other plants seem more likely to refer to dispersing adults rather than plants on which this thrips breeds. There is little evidence of the species being a pest, but discoloration and silver scarring around leaf bases has been associated with this thrips (O'Neill 1962).

Specimens discussed here are deposited in the Australian National Insect Collection, Canberra.

Acknowledgement

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